

We claim:

1. A dual mode packet phone comprising:
  - a first connector to connect the phone with a data network; and
  - a second connector to connect the phone with a backup network.
2. The phone of claim 1 wherein the backup network is a digital network.
3. The phone of claim 2 wherein the backup network is an analog network.
4. The phone of claim 1 further comprising a data network interface and a control unit for sensing when the data network is non-functioning.
5. The phone of claim 1 further comprising a backup switch for switching between the data network and the backup network.
6. The phone of claim 1 wherein the first connector is an RJ-45 Ethernet connector.
7. The phone of claim 6 wherein the second connector is an RJ-11 connector.

8. The phone of claim 5 wherein the second connector is in communication with a bypass unit.
9. The phone of claim 1, further comprising a bypass unit and wherein:
  - the first connector is an RJ-45 Ethernet connector to a local area network;
  - the second connector is an RJ-11 connector to a bypass internal analog line;
  - wherein a bypass unit activates the bypass internal analog line through the RJ-11 connector when the bypass unit senses an off-hook condition on said line.
10. The phone of claim 9, further comprising an analog trunk between the bypass unit and a Public Network.
11. The phone of claim 10 further comprising a gateway analog line, and wherein in a normal of operation of the phone, the bypass unit connects the gateway analog line to the analog trunk.
12. The phone of claim 11, wherein the phone shares a set of analog trunks irrespective of whether the gateway analog line or the bypass internal analog line is passing voice information to the bypass unit.
13. The phone of claim 1, further comprising bypass and gateway external analog lines that are dedicated trunk circuits from the PSTN.

14. The phone of claim 2 wherein the data network is a Voice-over-IP Ethernet LAN.
15. The phone of claim 14 wherein the backup network is a digital time division multiplexing (TDM) network.
16. The phone of claim 15 wherein the TDM network is a standard digital interface.
17. The phone of claim 15 wherein the TDM network is a proprietary digital interface.
18. The phone of claim 15 further comprising means for switching between the data network and the backup network.
19. The phone of claim 14 wherein the first connector is an RJ-45 Ethernet connector.
20. The phone of claim 19 wherein the second connector is an RJ-11 connector.
21. The phone of claim 1 further comprising:
  - a. a voice processing unit for transmitting and receiving voice signals;
  - b. a data network interface in communication with the first connector;

- c. a line interface in communication with the second connector;
  - d. a backup switch that can selectively provide a connection between the voice processing unit and either the line interface or the data network interface;  
and
  - e. a control unit having a bi-directional link with the voice processing unit, the data network interface, the line interface, and the backup switch.
22. The phone of claim 21 wherein the data network is a Voice-over-IP Ethernet LAN.
23. The phone of claim 22 wherein the backup network is a digital time division multiplexing (TDM) network.
24. The phone of claim 22 wherein the backup network comprises an external analog line to a PSTN.
25. The phone of claim 22 wherein the backup network comprises an internal analog line to a bypass unit.